

# Constant Current Regulator



## Compliances (Current Editions)

FAA: AC 150/5345-10, ETL Certified

ICAO: NAVAIR 51-50AAA-2; UFC 3-535-02; Annex 14; Areodrome Design Manual Part 5



## Application

Our L-828 / L-829 Constant Current Regulator is used to provide power to airfield lighting systems. It offers a selectable AC constant current to change the airfield lighting intensity as needed based on weather conditions.

## Key Features

- Ferroresonant design allows for high-efficiency, high-power factor sinusoidal constant current output
- Efficiency over 90%, power factor .99
- Stable output current is not affected by flashing loads from strobes or runway guardlights
- Intuitive, fully digital interface included on all models
- Powerful software allows CCR to be recalibrated in field, recall previous settings & calibration, change brightness steps, track warnings & faults, and more
- Digital output current reading and digital output voltage reading on all models
- High quality lightning arrestors used for output connections
- Transient protection on input power circuit ensures long CCR life and equipment protection
- Open circuit, over-current, and over-voltage protection on all models
- Safety interlock disconnects output power when cabinet door is opened
- Quiet operation
- Stackable



# Specifications

## General Catalog Numbers

FR□□□-□□□□□□-□□□

**Type**  
828 = Ferroresonant L828  
829 = Ferroresonant L829

**Output Rating**

- 1 = 1kW
- 2 = 2kW
- 4 = 4kW
- 5 = 5kW
- 7 = 7.5 kW
- 10 = 10kW
- 15 = 15kW
- 20 = 20kW
- 25 = 25kW
- 30 = 30kW
- 50 = 50kW\*
- 70 = 70kW\*

**Class**

- A = 6.6 Amp
- B = 20 Amp

**Input Voltage**

- 1 = 208 VAC, 60Hz
- 2 = 220 VAC, 60Hz
- 3 = 240 VAC, 60Hz
- 4 = 480 VAC, 60Hz
- 5 = 220 VAC, 50Hz\*
- 6 = 230 VAC, 50Hz\*
- 7 = 240 VAC, 50Hz\*
- 8 = 380 VAC, 50Hz\*
- 9 = 400 VAC, 50Hz\*

**Control Voltage**

- A = 24 VDC Internal
- B = 24 VDC External
- C = 48 VDC Internal
- D = 48 VDC External
- E = 120 VAC Internal
- F = 120 VAC External

**Brightness Steps**

- 1 = Single Step - 5.5A (default), or other as specified
- 3 = 3-Step - 4.8A, 5.5A, 6.5A
- 5 = 5-Step - Class 1 is 2.8A, 3.4A, 4.1A, 5.2A, 6.6A  
Class 2 is 8.5A, 10.3A, 12.4A, 15.8A, 20A

**CCR Options**

- 0 = None
- 1 = S-1 Cutout installed
- 2 = Insulation Resistance Monitor (Automatic Megger)
- 3 = Input Power Monitoring (current, voltage, VA, power, power factor)
- 4 = Output Power Monitoring (voltage, VA, power, power factor)
- 5 = Integral Circuit Breaker

- 0 = None
- 1 = Castors
- 2 = Lift Kit

**COMM Options**

- N = None
- A = Dual Ethernet (ModTCP or Ethernet/IP)
- B = Dual Ethernet (ModTCP or Ethernet/IP) & Dual RS-485
- C = Dual Ethernet w/PoE (ModTCP or Ethernet/IP)
- D = Dual Ethernet w/PoE (ModTCP or Ethernet/IP) & Dual RS-485

\*Compliant to FAA Specification

### Additional Option Information

- Internal S-1 Cutout: An Airport Lighting Company S-1 Cutout is installed directly in the enclosure of the CCR. Once the CCR is turned off, the S-1 Cutout handle may be removed and taken with servicing personnel to ensure safe work conditions.
- IRMS: The IRMS (Insulation Resistance Monitoring System) can be configured to run manually or daily. With this option, the CCR will provide a digital resistance measurement to the user on the front

display. The resistance reading can be tracked by site staff to gain insight to field-circuit integrity and to anticipate required maintenance.

- Integrated Circuit Breaker: A circuit breaker is included inside the CCR that is actuated with a door-mounted handle. The door-mounted handle is capable of accepting a lock for lock-out-tag-out safety measures.